MSD

December 29, 1999

Mr. Femi Akindele
Residual Project Manager
Kentucky/Tennessee Section
U.S. Environmental Protection Agency
Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 00, First Quarter (FY00-1Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by Radian Corporation, P.O. Box 13000, Research Triangle Park, North Coralina 27709 and received by MSD on December 15, 1999.

1. Radian Corporation letter dated November 29,1999, 2 pages.

2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.

3. Table 1, TO-14 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: September 17,1999, 1 page.

4. Table 2, On-Site Meteorological Data, Sampling date, September 17,1999, 1 page.

5. Table 1, TO-14 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: September 17,1999, 1 page

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street Louisville, Kentucky 40203-1911 502-540-6000 www.msdlouky.org

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.
Support Service Manager
RHW/rw
Lees-991Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Mr. Rick Hogan, Division of Waste Management
G. R. Garner, Executive Director
Lees Lane File

RADIAN INTERNATIONAL
A DAMES & MOORE GROUP COMPANY

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November 29, 1999

Mr. Dan Sammons
Chief Chemist
Louisville Metropolitan Sewer District
4522 Algonquin Parkway
Louisville, KY 40211

Dear Dan:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on 17 September 1999 (Quarter 26).

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary for the ambient sample with the primary analytes required for submission to EPA. All ambient air samples indicate low levels of the primary analytes at a similar level compared to the last reporting quarter. Quality control data from the field blank and laboratory replicates are of good quality.

The monitoring sites for the collection were chosen based on a combination of prevailing on-site meteorology and available sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were clear and sunny (60-70 F) during the majority of the sampling day. Meteorological data readings on-site were not available, therefore the information displayed in Table 2 was obtained from the Louisville Airport National Weather Service Station. The ambient samples were collected 3-5 feet above ground level. The ambient samples collected were integrated over a 7-hour collection period in Summa® canisters.

The methane analysis was performed by GC/FID on a separate analytical system from the TO-14 analysis at Radian's Austin Laboratory. The TO-14 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total nonmethane hydrocarbons prior to field deployment. All thirteen (13) planned field samples were successfully collected and analyzed for methane and the TO-14 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal Radian and project-required specifications.

The reliability of this data set can be characterize as good quality data, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels (acceptable) and the relatively few number of unresolved interfering peaks in the sample chromatograms. The field blank canister reported very low level values for toluene (0.02 ppb), and xylene (0.01 ppb). The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The gas monitoring wells were not screened with portable survey type instruments prior to field sample collection to a logistics problem. The analytical results from Well G-1 are higher than the other gas wells. The sample from Well G-1 had positive hits for acetylene, choroethane, cis-1,2 Dichloroethene, dichlorodifluoromethane , halocarbon 114, propylene, toluene and trichloroethene in the 50 - 1000 ppbv range. There was no evidence that the pump house was running during the collection activities.

Radian appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

c: Chad Morris, Radian/LOU
Project File/Task 27

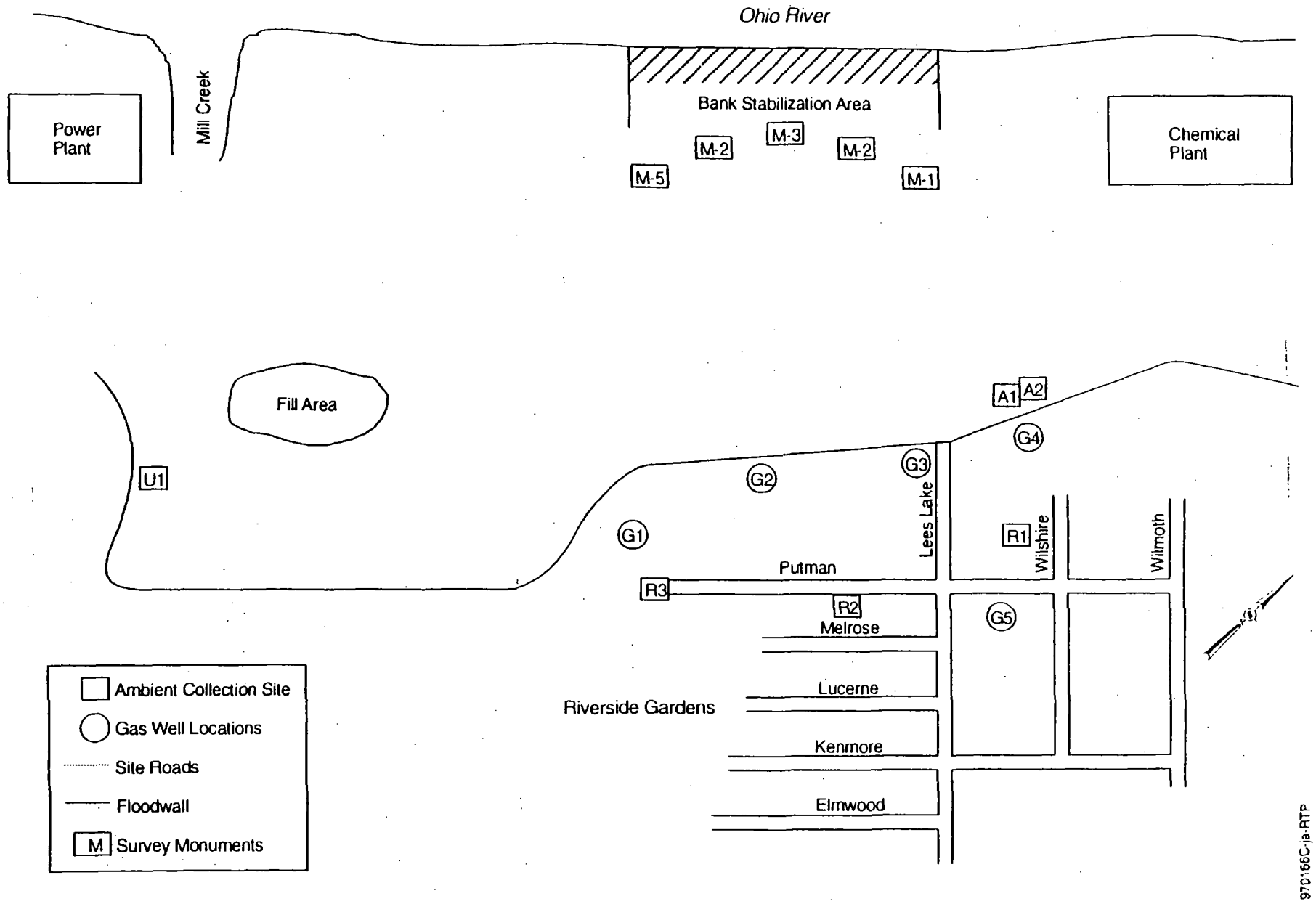

Figure 1. Lees Lane Landfill Sampling Locations

TABLE 1

TO-14 DATA SUMMARY FOR AMBIENT
AIR SAMPLES AT THE LEE'S LANE LANDFILL
LOUISVILLE, KENTUCKY

SAMPLING DATE: 17 September 1999

	Ambient Air Samples					
Sample ID	U1	A1	A2	R1	R2	R3
Canister ID	RA2033	RA2031	RA2029	RA2034	RA2032	RA2025
Dilution Factor	0.3513	0.3092	0.3092	0.2904	0.3230	0.2932
Location	Upwind	On-site	On-site (dup)	Residential	Residential	Residential
Veriflow ID	A181853	A133207	A176657	A133246	A218997	A168515
Compound (ppbV)						
Benzene	0.23	0.44	0.31	0.36	0.50	0.82
Methylene chloride	0.32	4.78	1.57	3.31	2.01	2.84
Toluene	0.55	3.78	1.96	2.11	2.06	3.33
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.42	1.13	0.52	0.66	0.89	2.74
Methane (ppmV)	20.6	16.1	16.8	16.5	13.7	15.2

TABLE 2

LOCAL METEOROLIGICAL DATA

SAMPLING DATE: 17 September 1999

Time	Barometric Pressure (in Hg)	Temperature (F)	Dewpoint (F)	Wind Direction (from)	Wind Speed (knots)	Observation
0600	30.18	52	45	North	5	Clear
0700	30.20	51	45	North	5	Clear
0800	30.22	51	45	North	3	Clear
0900	30.24	56	45	North	calm	Clear
1000	30.25	62	46	North	5	Sunny
1100	30.26	66	46	Variable	3	Sunny
1200	30.27	71	44	Northwest	6	Sunny
1300	30.26	73	43	North	9	Sunny
1400	30.24	74	41	North	12	Sunny
1500	30.21	76	43	Variable	7	Sunny
1600	30.18	76	42	Northeast	8/G16	Sunny
1700	30.16	77	46	Northeast	6	Mostly Sunny

Source: National Weather Service, Louisville, Ky.

TABLE 3

TO-14 DATA SUMMARY FOR GAS MONITORING
WELL SAMPLES AT THE LEE'S LANE LANDFILL
LOUISVILLE, KENTUCKY

SAMPLING DATE: 17 September 1999

	Well Samples						
Sample ID	G1	G2	G3	G4	G5-L	G5-R	BLANK
Canister ID	RA2026	RA2062	RA2030	RA2028	RA2036	HL2101	RA2035
Dilution Factor	0.3747	0.4024	0.4157	0.3943	0.3880	0.3960	0.3747
Orifice	A193111	A193112	A193106	A193099	A193108	A193104	NA
Compound (ppbV)							
Benzene	23.7	0.06	0.24	ND	0.10	0.03	ND
Methylene chloride	0.58	0.12	0.18	0.13	0.11	0.12	ND
Toluene	154	0.22	0.72	0.15	0.27	0.17	0.02
Vinyl chloride	11.8	0.25	ND	ND	0.68	ND	ND
Xylene (Total)	3.09	0.14	0.08	0.08	0.09	0.08	0.01
Methane (ppmV)	11.7	16.2	17.2	16.9	12.1	15.5	ND